****
ISC **ISC 01 11 00.00 99 (February 2009)**

Preparing Activity: ISC-ES **Superseding ISC-ES 01 11 00.00 99 (January 2009)**

ISC GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2009
****

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 11 00.00 99

SUMMARY OF WORK

02/09

-- End of Section Table of Contents --

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ISC **ISC 01 11 00.00 99 (February 2009)**

Preparing Activity: ISC-ES **Superseding**
ISC-ES 01 11 00.00 99 (January 2009)

ISC GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2009
****

SECTION 01 11 00.00 99

SUMMARY OF WORK
02/09

****
NOTE:This specification covers requirements for basic description and special administration instructions of the selected project.

Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification at ISC-ES.
****

****
NOTE: Describe the project and the types of work involved in sufficient detail so as to present a general picture which is self contained but does not refer to the drawings or to other parts of the specification. Mention peculiar or hazardous work, and monitoring of archaeological resources. Use this paragraph verbatim in preparing the synopsis for advertising the project.
****

PART 1 GENERAL

1.1 SUMMARY

[The work to be performed under this [NASA][_____] project is located at Cape Canaveral Air Force Station. Cape Canaveral Air Force Station is located at the end of State Road 401, north of Port Canaveral and the City of Cape Canaveral, FL.]

[The work to be performed under this [NASA] [_____] project is located at Kennedy Space Center. Kennedy Space Center is located approximately 10 miles North of State Road 528 and the City of Merritt Island, FL on State

Road 3 and approximately 8.5 miles East of US Highway 1 and the City of Titusville, FL on State Road 408.]

****
NOTE: Provide a brief description of the project location in reference to an area, facility and/or room.
****

The project is located within [_____]. [This location is within a secure perimeter and additional badging and escort efforts are required per sub-part titled CONSTRUCTION AREA ACCESS AND CONTROL.]

The work to be performed under this project consists of providing the labor, supervision, equipment and materials to [_____].

1.2 PERIOD OF PERFORMANCE

The period of performance for this scope of work, price and schedule page will be provided by the Contracts Administrator and addressed within the Request for Proposal.

1.3 PROJECT DESCRIPTION

1.3.1 Civil/Site

[_____]

1.3.2 Structural

[_____]

1.3.3 Architectural

[_____]

1.3.4 Mechanical

[_____]

1.3.5 Electrical

[_____]

1.3.6 Special Construction

[_____]

1.4 DEFINITIONS

a. Definitions pertaining to sustainable development: As defined in ASTM E2114 and as specified herein.

b. Biobased Materials: As defined in the Farm Security and Rural Investment Act, for purposes of Federal procurement of biobased products, "biobased" means a "commercial or industrial product (other than food or feed) that is composed, in whole or in significant part, of biological products or renewable domestic agricultural materials (including plant, animal, and marine materials) or forestry materials." Biobased materials

also include fuels, chemicals, building materials, or electric power or heat produced from biomass as defined by The Biomass Research and Development Act of 2000.

****
NOTE: According to the January 11, 2005 U.S. Department of Agriculture (USDA) Guidelines for Designating Biobased Products for Federal Procurement, biobased content is a percentage of the carbon in the product. The USDA will recommend the minimum biobased content of biobased products designated in the Federal Biobased Products Preferred Procurement Program, 7 CFR Part 2902. For current designations under the Federal Biobased Products Preferred Procurement Program (FB4P), refer to www.biobased.oce.usda.gov.
****

(1) Biobased content: The amount of biobased carbon in the material or product as a percentage of weight (mass) of the total organic carbon in the material or product.

c. Deconstruction: Disassembly of buildings for the purpose of recovering materials.

****
NOTE: Refer to ISO Guide 64 and EPA's website at www.epa.gov/dfe for additional clarification on Design for the Environment.
****

d. DfE (Design for the Environment): A technique that includes elements of resource conservation and pollution prevention as applied in various product sectors. A technique that incorporates approaches which are part of product (or assembly) concept, need and design. Considerations involve material selection, material and energy efficiency, reuse, maintainability and design for disassembly and recyclability.

e. Non-Renewable Resource: A resource that exists in a fixed amount that cannot be replenished on a human time scale. Non-renewable resources have the potential for renewal only by geological, physical, and chemical processes taking place over of millions of years. Examples include: iron ore, coal, and oil.

f. Perpetual Resource: A resource that is virtually inexhaustible on a human time scale. Examples include solar energy, tidal energy, and wind energy.

g. Recycled Content Materials: Products that contain preconsumer or post-consumer materials as all or part of their feedstock.

****
NOTE: A renewable resource can be exhausted if improperly managed. However, a renewable resource can last indefinitely with proper stewardship. Examples include: trees in forests, grasses in grasslands, and fertile soil. USGBC-LEED uses the term in reference to plants.
****

h. Renewable resource: a resource that is grown, naturally replenished, or cleansed, at a rate which exceeds depletion of the usable supply of that resource.

(1) Rapidly renewable material: Material made from plants that are typically harvested within a ten-year cycle.

i. Stewardship: Responsible use and management of resources in support of sustainability.

****
NOTE: Under EO 13423, sustainable' means "to create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans"
The following definition is consistent with the EO and with ASTM E2114.
****

j. Sustainability: The maintenance of ecosystem components and functions for future generations.

1.5 REFERENCES

****
NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text are automatically deleted from this section of the project specification when you choose to reconcile references in the publish print process.
****

The publications listed below form a part of this section and the work requirements:

AMERICAN WELDING SOCIETY (AWS)

AWS B2.1	(2005; Errata 2006; Errata 2006) Welding Procedure and Performance Qualification
AWS D1.1/D1.1M	(2008) Structural Welding Code - Steel

ASME INTERNATIONAL (ASME)

ASME BPVC SEC IX	(2007; Addenda 2008) Boiler and Pressure Vessel Code; Section IX, Welding and Brazing Qualifications

GREEN BUILDING INITIATIVE (GBI)

Green Globes	(2004) Green Globes(tm) US Green Building Rating System

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

Energy Star	(1992; R 2006) Energy Star Energy Efficiency Labeling System

U.S. GREEN BUILDING COUNCIL (USGBC)

LEED	(2002; R 2005) Leadership in Energy and Environmental Design(tm) Green Building Rating System for New Construction (LEED-NC)

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910	Occupational Safety and Health Standards
29 CFR 1926	Safety and Health Regulations for Construction

1.6 SUBMITTALS

****

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Keep submittals to the minimum required for adequate quality control. Include a columnar list of appropriate products and tests beneath each submittal description.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Subcontractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for

Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Submittal items not designated with a "G" are considered as being for information only for Army projects and for Subcontractor Quality Control approval for Navy, Air Force, and NASA projects.

****

Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES in sufficient detail to show full compliance with the specification:

SD-01 Preconstruction Submittals

Submit the following items to the Contracts Administrator (throughout this document, the term "Contracts Administrator" means "Contracts Administrator or designated Representative:"

****
NOTE: Select items below to be submitted for review.
****

Construction Schedule
Safety / Accident Prevention Plan
Lifting Operation Plan
Hazardous Material Safety and/or Site Plans
Performance of Work Plan
Utility Outage Requests
Connection Requests
Borrow Requests
Excavation Requests
Brush/Tree Clearing Requests
Hot Work Requests
Traffic Control Plan

SD-06 Test Reports

Insulation Resistance Test
Concrete Testing
Compaction Testing
Premise Wire Testing
Daily Quality Assurance Inspection Report
[Energy Performance Rating]

SD-07 Certificates

Certification of Welders

SD-11 Closeout Submittals

Waste Disposal Log

1.7 CONSTRUCTION SCHEDULE

Submit a detailed Construction Schedule, including an electronic copy in Microsoft Project format after Notice to Proceed is given. Progress payments will be issued from the approved schedule by the Contracts

Administrator. Include the schedule information categories;

Contractor's Name
Contract Number
Contract Description (Name)
Title Blocks for approval
Project Manager
Contracts Administrator
A breakdown into major headings for primary work divisions
A line item breakdown under each major heading sufficient to track the progress of the work.
A line item showing contract final (Completion) tasks which includes Punch List, Clean-up, Down/No Dig days and Close out documentation.
The estimated cost and % weight of the total contract cost for each activity on the chart.
Separate line items for mobilization and shop drawings submittal and approval (these items are to show no associated costs)
The Base Line Schedule and all updates with visible Date Line for validation of progress related to a given period.

Submit hard copies per Terms and Conditions and one (1) computer disc for the base line progress update schedule review. Contractor approval or acknowledgement of a Baseline or As-Planned Schedule does not transfer responsibilities from the Subcontractor.

1.8 SAFETY/ACCIDENT PREVENTION PLAN SUBMITTALS

Submit the following for this work:

Submit a site specific Safety / Accident Prevention Plan detailing how the work does not expose government property, the public, subcontract workers, or of any other Subcontractor employees to hazards that are created. The Subcontractor is required to follow all OSHA regulations. Do not include Subcontractor's Internal Safety Program for the protection of their workers since that is an issue between the Subcontractor and OSHA. In addition, submit Hazardous Material Safety and/or Site Plans to the Contracts Administrator for delivery to directorate outlined in the attachment titled "SAFETY INFORMATION AND REQUIREMENTS."

1.9 CONTRACT DRAWINGS

****
NOTE: Designer needs to choose if the project is going to require full size drawings or if it can be done with sketches. If full size drawings are to be used then a separate document no. from Electronic Document Control (EDC) has to be established. If the project only requires 8 1/2" x 11" or 11" x 17" sketches then they can be included with the specifications under the same document no.
****

[The following drawings accompany this specification and are a part thereof.

Drawing No. [_____], Sheets 1 through [_____]]

[Sketches that accompany and are part of this specification can be found at the end of this document.]

Construction documents including drawings, maps, and specifications will be furnished to the Subcontractor in hard copy format and at the Contractor's discretion in an electronic format. When provided, drawings will be in a .dgn or .dwg format. Reference publications will not be furnished.

The drawings indicate the general location and arrangement of existing conditions. Existing underground utilities and interior utility runs shown on these drawings may not be complete and the locations are approximate. Prior to developing any shop drawings and/or work plans it is strongly recommended that the Subcontractor visit the site to determine the complexity of the work and the existing conditions. Verify all dimensions, connections, and other field conditions to determine the size and quantity of equipment and materials. Verify dimensions and elevations indicated on the drawings and compare them to the field conditions. Conditions which are obvious/visible or which are anticipated by the Subcontractor on inspection are not considered under the Differing Site Conditions clause of this subcontract.

1.9.1 Project Discrepancies

Discrepancies between the drawings, specifications and/or existing conditions that are found, are to be referred to the Contracts Administrator in writing, for review, before the affected work is performed. The Subcontractor is responsible for carrying out the work per industry standard and in a manner satisfactory to Contractor if notification is not made.

1.10 PROJECT ENVIRONMENTAL GOALS

****

NOTE: It is not typical to cite project goals in construction specifications as the specifications are intended to delineate the specific requirements for the Subcontractor. It is difficult, if not impossible, to enforce goals. Goals generally pertain to design decisions (typically the responsibility of the architect/engineer) or functional parameters (typically the decision of the owner).
However, it may be helpful to identify project environmental goals as Subcontractor means and methods (the determination and implementation of which is often entirely within the Subcontractor's responsibility) may have significant environmental impacts. Additionally, it may be helpful to identify the environmental goals that framed design decisions so that if the Subcontractor wishes to propose alternatives, such alternatives can be consistent with the project environmental goals. Edit below to suit project.

****

A. General: Support implementation of federal policy and programs for sustainable building, in accordance with EO13423 and Guiding Principles for Federal Leadership in High Performance and Sustainable Building as per the Memorandum of Understanding dated January 2006, as follows:

a. Employing integrated design: As specified and as follows:

(1) ASTM E2348, Standard Guide for Framework for a Consensus-based Environmental Decision making Process

(2) ASTM E2432 Standard Guide for General Principles of Sustainability Relative to Buildings

b. Optimizing energy performance: As specified and as follows:

(1) Energy Efficiency: EO 13423 and Energy Policy Act of 2005; 10 CFR 435 - Energy Performance Standards for New Buildings; and, FAR Part 23, 48 CFR 23 - building equipment and lighting

(2) Energy Star

(3) Federal Energy Management Program (FEMP)

c. Protecting and conserving water: As specified and as follows:

(1) Water stewardship: FEMP Best Management Practices for Water Conservation

d. Enhancing indoor environmental quality: As specified and as follows:

(1) Sheet Metal and Air Conditioning Contractor's National Association Indoor Air Quality Guidelines for Occupied Buildings under Construction

e. Reducing the environmental impact of materials. As specified and as follows:

(1) Recycled Content Products: EPA Comprehensive Procurement guidelines

(2) Biobased Content Products: USDA Biobased (pending)

(3) Electronics stewardship: Federal Electronics Challenge; Electronic Product Environmental Assessment Tool (EPEAT)

(4) Environmental Management System protocols: ISO 14001 or equivalent

1.10.1 Independent Verification

****
NOTE: There are multiple ways of certifying green buildings.
****

[1.10.1.1 US Green Building Council (USGBC) - LEED(tm) Rating System

Provide [completed project in compliance] [work consistent] with USGBC LEED-NC(tm) [v2.2][_____] (LEED), level [certified] [silver] [gold] [platinum] requirements.

][1.10.1.2 ASTM International (ASTM) - Standard Guide for General Principles of Sustainability Relative to Buildings

ASTM E2432: Provide documentation that work is consistent with the [environmental,] [social,] [and, economic] principles of sustainability relative to building as identified in ASTM E2432.

][1.10.1.3 Green Globes US

****
NOTE: Green Globes US is the newest addition to the BREEAM/Green Leaf suite of environmental assessment tools. BREEAM (BRE Environmental Assessment Method) is one of the world's most widely used means of reviewing and improving the environmental performance of buildings.
****

Provide [completed project in compliance] [work consistent] with Green Globes US level [Two Globes] [Three Globes] [_____] requirements.

][1.10.1.4 EPA Energy Performance Rating

****
NOTE: Determine the energy use target rating that meets or exceeds Energy Star. Provide Energy Star target using EPA Target Finder. Use Target Finder to rate estimated energy use for the completed design. If design achieves a rating of 75 or higher, provide Statement of Energy Design Intent (SEDI) generated from Target Finder to document results. Contracting Officer will submit the SEDI to EPA and will receive the "Designed to Earn the Energy Star" graphic to place on drawings to show that the energy use for the design meets EPA criteria for energy efficiency. Include the following paragraph if graphic has been earned.
****

Provide work consistent with drawings in order to meet Energy Star in accordance with design.

****
NOTE: The EPA's National Performance Track program is a public/private partnership recognizing top environmental performance among participating U.S. facilities of all types, sizes, and complexity, public and private, manufacturing or service-oriented. Performance Track is designed to recognize facilities that consistently meet their legal requirements and have implemented high-quality environmental management systems. Performance Track encourages facilities to continuously improve their environmental performance and to work closely with their community and employees. Refer to http://www.epa.gov/performance track/
****

EPA National Performance Track: Provide work consistent with EPA

Performance Track criteria and the [proposed] Environmental Management System (EMS) for the project.

]1.11 WORK RESCHEDULING

Allow for days where construction activity is prohibitive. Further allowance for days of excavation and subsurface activity abeyance may be imposed where other construction activities are permitted. The Contracts Administrator will provide the number of days for each of these conditions within the Request of Proposal (RFP)and provide notification each time the restrictions are invoked.

Normal duty hours for work are from 7:00 a.m. to 3:30 p.m., Monday through Friday. Submit a written request for additional work for approval from the Contracts Administrator in advance of the proposed work period.

1.12 OCCUPANCY OF PREMISES

Building(s) may be occupied during this Subcontract. [A joint occupancy condition at the site will exist between the subcontractor and the facility occupants, including Maintenance and Operations Personnel.]

****
NOTE: Editor to coordinate with Construction Management and Contracts to determine if the following paragraph is required on a project by project basis.
****

[Submit a Performance of Work Plan before work is started to the Contracts Administrator for approval. Include in the plan a sequence of procedures, means of access, space plan for storage of materials and equipment, and use of approaches, corridors, and stairways.

]1.12.1 Facility Contents

1.12.1.1 Responsibilities

Closely coordinate the schedule of work with the Contracts Administrator. Unless otherwise stated, remove and store all furniture, fixtures and equipment that are within the project area as required to perform the work. Cover and protect from damage any movable or fixed furniture,fixtures and equipment remaining in the work area from damage. All relocated/stored items are also to be protected from damage throughout the construction period. After completion of work and prior to final acceptance, replace all items as directed.

The Subcontractor will take necessary precaution to protect building occupants in the area from the construction area. Occupancy notifications will be posted in a prominent location in the work area. Coordinate with the facility manager via Construction Management.

[The entire area will not be available to the Subcontractor at one time. The following phases of work and procedures are required:

a. [_____]

b. [_____]]

[Demolition of [mechanical, electrical, etc.] system(s)are not to be started until replacement equipment is on site.]

1.12.1.2 New Material and Construction Equipment

Only material and construction equipment designated for performance of Subcontract work is allowed to be stored at the construction site or located in Government-controlled warehouses or shop facilities. The Subcontractor is responsible for securing and protecting all items.

****

NOTE: Coordinate with Construction Management and Contracts for proper editing of the following sub-part as it relates to the specific job.

****

1.13 CONSTRUCTION AREA ACCESS AND CONTROL

1.13.1 Access and Control Requirements

Exclusive use or control of any area will not be allowed. Maintain access for the Government and Government Contractors to all areas at all times. Schedule all work around operational constraints.

Work in and around the project [does][does not]require security escorts.

[A Limited Unescorted Access System is in place and will not require Security Escorts. This requires the Subcontractor to provide a list of names, social security numbers and citizenship of the employees that need access into this controlled area. The Subcontractor is held responsible/accounting for "Temp. Passes". Area familiarization classes are required.]

[A Limited Escorted Access System is in place [in and/or around a portion of the work to be done]and will require Security Escorts to work within the controlled area. This requires the Subcontractor to provide escorts cleared through the PRP process. The number of employees may depend on application of the project. A Maximum of [Five (5)][Ten (10)]personnel per escort will be allowed and all personnel are to remain within visual contact of their escort. Maintain original timeline on schedules submitted for all work, including start time, estimated number of personnel, and hours to be worked each day. Provide Contracts Administrator with forty-eight (48) hours written notice prior to any deviation for approval.]

The Government / Contractor will not provide escort services.

1.13.2 Security

Entry into a secured area is a privilege that can be denied, suspended or revoked. A Temp. Pass can not be used for sightseeing or cutting through any secured portion of the Space Center. Personnel are authorized to go only to and from their work locations. When entering the main gates, hold the pass face out toward the officer. Also, display the badge at all times above the waist with the picture and/or expiration date visible. The swapping of passes between employees is prohibited and violators may be barred from KSC/CCAFS. Do not ware passes outside KSC/CCAFS or when off duty. Do not leave the pass in a vehicle where it can be stolen. Report

lost or stolen passes immediately to your supervisor. When an employee is terminated confiscate the pass, escort the employee to the gate and return the pass to Security.

All personnel are subject to search of their vehicles and property. Alcoholic beverages, including "non-alcoholic" beer and malt beverages are not allowed. Firearms of any make or caliber, ammunition, air guns, large knives and dangerous weapons of any kind are not permitted.

Security Police is the authorized law enforcement agency with issuance of citations. Comply with all traffic laws and the Florida Financial Responsibility Act.

All hand carried items (briefcases, gym bags, packages, etc.) require an identification tag or label. Information to be included on the baggage tag is the name of the Owner and the company the owner works for including phone number and address. The Security office within NASA HQ can provide laminated tags using business cards provided to them. Unidentified items that arouse concerns for explosive devices may be confiscated or destroyed.

1.14 STORAGE, TRANSPORTATION AND PROTECTION

1.14.1 Storage

Subcontractor may be assigned space at one of the base central storage areas upon request to the Contracts Administrator. Indicate dimensions of trailer, size of storage area, and utilities required. All trailers are required to be in good and safe condition operational condition. Additional requirements for trailer installation will be provided to the Subcontractor at the time the space is granted.

The Subcontractor is responsible for contacting the local phone company, Bell South, to request a telephone number and line for their office trailer.

****

The following paragraph is used only for projects constructed on CCAFS.

****

[Paint office trailers and long term (longer than one year) storage trailers to match the base standard color "Conch Shell", as noted in the base Facilities Excellence guide. Trailers located on site for short term storage, 10 working days or less, do not need to meet this requirement. In addition, skirt all office trailers and long term storage trailers along the entire perimeter with a wood lattice material. Paint this skirting to match the same trailer color as described above. The Subcontractor is responsible for the storage and protection of all his materials and equipment, whether incorporated into the job or not. The Subcontractor is also responsible for enclosing the assigned storage area with a minimum 6' high, black vinyl coated galvanized security fencing, with a black nylon screen covering as approved by the Contracts Administrator. Continuously maintain the fence in good repair throughout the construction. The intent is to conceal construction materials, equipment and debris from adjacent occupied areas during the life of the Subcontract. Upon completion of the Subcontract, the Subcontractor is be responsible for removing the fence and restoring the site to its original condition.]

1.14.2 Hazardous Materials

Store and handle Hazardous Materials & petroleum product containers as outlined in the Safety Information attachment and Section 01 35 43.00 99 ENVIRONMENTAL PROCEDURES.

****
NOTE: Delete the following subpart in its entirety if Government Furnished Items are not provided as part of the project.
****

[1.15 GOVERNMENT/CONTRACTOR-FURNISHED MATERIALS

Government/Contractor will furnish to the Subcontractor the following property to be incorporated or installed in the work, or used in its performance. Such property [will be furnished as Freight On Board (F.O.B.) at [_____]][can be picked up at [_____]]. Maintain and protect Government/Contractor furnished property once it is on the construction site.

ITEM	DESCRIPTION	QUANTITY	AVAILABLE	SALVAGE RECEIVING POINT
[_____]	[_____]	[_____]	[_____]	[_____]
[_____]	[_____]	[_____]	[_____]	[_____]

Quantities indicated for the above-listed items marked with an asterisk are estimates. It is the intention of the Government/Contractor to furnish all quantities of the asterisk items required to complete the work as specified.

Quantities stated for the above items not marked with an asterisk are all that will be furnished by the Government/Contractor. Furnish any additional quantities required.]

1.16 ON-SITE PERMITS

1.16.1 Utility Outage Requests and Connection Requests

Do not interrupt existing water, sewer and power services to all facilities in the project area, unless authorized and approved by the Contracts Administrator. Schedule work to hold outages to a minimum.

Schedule and coordinate Utility Outages and Connection Requests that affect existing systems, at the convenience of the Government and Contractor. This may require scheduling work outside of the regular working hours or on weekends, at no additional cost to the Government/Contractor.

State the system involved, area involved, approximate duration of outage, and the nature of work involved for each Utility Outage and Connection Request.

1.16.1.1 Requirements

Submit a written request for a utilities outage (electricity, communication, domestic water, waste water, compressed air, gas, steam, air conditioning, etc.) to the Contracts Administrator at least 14 calendar

days in advance of the desired outage. Approval is required prior to scheduling any outage. Carefully observe limitations noted on the approved outage authorization. Make final verbal coordination at least 4 hours prior to the outage by calling the Contracts Administrator or representative. A utilities outage without prior approval and coordination is prohibited. Outage will not be granted until required material is staged on-site and available for required work during outage.

Since many systems are critical to facility operations, keep to an absolute minimum the number and duration of utility outages. Coordinate all work effort and provide sufficient manpower, materials, and equipment to complete the work within the authorized outage window.

Interrupt existing utility services only when approved by the Contracts Administrator. Schedule the interruption at a time of minimum demand on the utility, convenient to the Government and Contractor.

Make all necessary arrangements to schedule and provide connections to existing utilities and to cause minimum interruption to system operation, temporary utility hook-ups and disconnects. Conduct a Pre-Op meeting with all subcontract employees working on the affected system during the outage just prior to outage occurring.

1.16.2 General Testing

In addition to the tests required within the project drawings and specifications, at minimum conduct the following test;

a. Conduct and submit a Insulation Resistance Test on all new wiring install in the field.
b. Conduct and submit Concrete Testing as detailed in the specifications.
c. Conduct and submit Compaction Testing as detailed in the specifications.
d. Conduct and submit Premise Wire Testing. Submit a test plan for approval prior to conducting the test.

Submit a written report, signed by the person performing the test and Subcontractor's Rep. viewing the test, of all test performed. Include dates of test and results, listing manufacturer model number, serial number, and calibration date of any test equipment used.

1.16.3 Permits

Submit Borrow Requests, Excavation Requests, Brush/Tree Clearing Requests, and Hot Work Requests to the Contracts Administrator. Permits will be obtained by the Contracts Administrator or representative for distribution to the Subcontractor.

Post permits in a conspicuous location in the construction area.

Burning of trash or rubbish is strictly prohibited on all areas of KSC.

Obtain from the Contracts Administrator or representative, assistance for locating current subsurface utilities for the particular area to be worked on prior to performing any excavation work or any surface penetrations 6 inches or deeper (such as driving stakes more than 6 inches in the ground). Stake out subsurface high voltage cables, communication cables, and pipe lines indicated within the scope of the work contemplated.

Notify the Contracts Administrator, prior to the start of excavation work or surface penetration, to enable the review of measures being taken to prevent hazard to employees and possible damage to subsurface utilities, and allow Contractor time to respond to utility locate requests. Immediately inform the Contracts Administrator of intention to initiate work prior to actual start of activity.

After an excavation permit has been obtained and prior to any excavating, verify with Duty Office that there are no Test Control Periods (TCPs)or "No Dig Days" that would prevent excavation.

Temporarily halt any machine excavation work or other surface penetration when approaching within 10 feet of the existing utility line until exposure of the utility line by hand excavation to fix its location has been completed.

1.17 SALVAGE AND DISPOSAL OF MATERIAL AND EQUIPMENT

1.17.1 Removal

Remove and/or relocate only those materials or items of equipment specifically indicated in the drawings and specifications. Perform removal operations in such a manner that adjacent areas, installed equipment, or existing utilities are not damaged. Repair all openings that occur due to removal or demolition operations to match adjacent, existing surfaces. Repair any damage incurred during removal operations at no additional cost to the Government/Contractor.

****

NOTE: If there are not to be any salvaged material or equipment, delete 1.12.2 in its entirety.

****

1.17.2 Salvage Of Material And Equipment

All salvageable materials or items to be removed remain the property of the Government. Salvageable items are listed below in the paragraph entitled, "Salvage Items".

Maintain property control records for material or equipment designated as salvage. Subcontractor's system of property control requires approval by the Contracts Administrator. Subcontractor is responsible for storage and protection of salvaged materials and equipment until disposition by the Contracts Administrator.

Protect material to be salvaged and reinstalled during removal and stored to prevent damage.

For reference purposes salvageable is defined as: items, material, equipment which can be refitted, reworked, and restored and put to use or sold. The Government/Contractor has sole discretion as to determining whether any particular item is salvageable.

1.17.2.1 Salvage Items

Salvage the following equipment and materials:

a. [_____]

b. [_____]

c. [_____]

Inspection by the Government/Contractor of additional items will determine whether they are salvageable or debris. Include a properly prepared NASA 7-49 with all salvageable material deliveries as provided by Contracts Administrator.

1.17.3 Waste Disposal

Unless otherwise directed, remove non-salvageable material and debris from work areas and dispose of daily.

Refer to Section 01 35 43.00 99 ENVIRONMENTAL PROCEDURES for further waste disposal and record keeping requirements.

1.17.4 Cleanup

Upon completion of the construction each day, leave the work premises in a clean, neat and workmanlike condition, satisfactory to the Contracts Administrator. Additional information is contained in Section 01 35 43.00 99 ENVIRONMENTAL PROCEDURES and the attachement titled "Safety Information and Requirements".

1.17.5 Salvage And Disposal Record Keeping

Maintain a disposal log of all materials removed from the job site. Include waste materials disposed in landfills and materials sold for salvage and recycled. The disposal log form is available from the Contracts Administrator. At a minimum, identify the type of materials, material weight, disposition (landfill or recycle), receiving facility (name, address and phone number) and net disposal costs or rebates including container costs, hauling and tipping fees as applicable. Submit two copies of the Waste Disposal Log and all dump tickets and receipts associated with disposal to the Contracts Administrator at the completion of the project.

[]1.18 COMMUNICATION SECURITY

Government telecommunications networks are continually subject to interception by hostile/unfriendly intelligent organizations. Therefore, the monitoring and recording of both land line and cellular telephone calls from, or to Government installations is conducted. The Subcontractor is responsible for ensuring frequent dissemination of this information to all employees dealing with official information.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 DELIVERIES

3.1.1 Non-Hazardous Deliveries

To the maximum extent possible, schedule deliveries between 1000 and 1500

hours to avoid the peak traffic volume times. Coordinate in advance, special deliveries, deliveries after normal business hours, or deliveries that cannot negotiate through the barricades.

All delivery vehicles will be inspected by Security Forces personnel. The driver of each delivery vehicle and their passengers will be requested to provide the following:

a. A valid photo ID; and

b. A valid bill of lading; and

c. A known delivery point; and

d. A Point of Contact (POC) and phone number of POC to vouch for delivery.

Only deliveries that can be verified will be allowed to proceed onto the installation.

3.1.2 Hazardous Deliveries

[Contact Security to schedule hazardous deliveries a minimum of 48 hours in advance for escort by Security Forces to and from job site. Deliveries that have not been arranged in advance will be turned away, requiring that they be re-scheduled.]

3.2 EXCAVATION

3.2.1 Work Clearance Request

Provide coordination for location of buried structures and utility lines before beginning any work involving digging/excavation. Post Permits on job site.

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NOTE: Use the following paragraphs 3.3.1.1, 1.2 and 1.3, including bracketed sentences, for projects located on CCAFS and can be used on NASA projects.
****

3.2.1.1 Location of Buried Structures and Utility Lines

Accurately locate and stake structures and utility lines indicated. [Provide a drawing indicating the full extent of digging/excavation (width, depth, and length of trench or hole)and attach to the AF FORM 103.] If unidentified underground utilities are encountered during excavation, notify the Contracts Administrator and cease operations until they are properly identified.

3.2.1.2 Excavation, Trenching, and Backfilling

Open only those trenches for which material is ready to be placed. As soon as approved by the Technical Representative, backfill and tamp trenches as required by the drawings and specifications. [As a minimum, replace topsoil and grassed by seeding the disturbed area. Water and maintain for a minimum of 60 calendar days.] Stockpile excavated materials a minimum of two feet from the edge of the excavation. Mark or barricade construction work which presents a hazard.

3.2.1.3 Cutting of Roads, Streets, Driveways, and Paved Areas

Repair roads, streets, and paved parking areas which require surface cutting under this project within 10 calendar days after initial cutting. Provide a minimum of 2 inches of asphalt topping to match existing (concrete topping on asphalt areas is not allowed).

3.2.1.4 Traffic Control

Full or partial closures of Streets, parking lots, and other traffic areas is not permitted until a traffic control plan is approved by the Contracts Administrator seven (7) day prior to scheduled closure. Submit written request a minimum of fourteen (14)calendar days before the scheduled closure. Submit a Traffic Control Plan developed by a FDOT Certified Traffic Controls Engineer or a Licensed Professional Engineer registered in the State of Florida, include a copy of the planner's certificate if the plans are not sealed by the professional engineer.

The loading and off-loading of equipment and materials justifies the temporary disruption of normal traffic flow without submitting a traffic control plan, providing safe practices are followed.

Mark, barricade, and illuminate construction work on or near roads or streets which present a traffic hazard per OSHA 29 CFR 1910. Provide signaling, lighting, and barricades in the construction area conforming to the Manual on Uniform Traffic Control Devices, OSHA 29 CFR 1926.201 and 1926.202. Comply with OSHA, FDOT and Environmental Laws for all equipment on the construction site.

3.3 LAND SURVEYING REQUIREMENTS

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NOTE: Delete surveying requirements if this is exclusively an interior modification resulting in no change to the footprint of the facility or to outdoor utilities.

****

Include all projections and datum points required for all modifications affecting civil site plans (e.g., utilities, additions, new construction or storm water modifications). Perform the survey by a licensed surveyor.

3.3.1 Subcontractor Provided Survey Support

Reflect all civil site developments such as new facility and/or land modifications, external structural changes to aboveground structures, and changes to underground structures and utilities external to facilities located on lands owned by or held in leasehold interest of the federal government.

3.4 WELDER QUALIFICATION REQUIREMENTS

3.4.1 Welding And Brazing

Before assigning any welder/brazer to work in pipe and/or structural fabrication on this project, provide names to the Contracts Administrator of all welders/solderers together with written certification that these

welders/brazers have passed Qualification Tests as prescribed by AWS D1.1/D1.1M, AWS B2.1, and/or ASME BPVC SEC IX, as applicable. Perform all piping and/or structural welds by persons holding current certifications. If required, provide the test and certification by an independent organization regularly engaged in the testing and certification of welders. Provide certification for each welder/brazer dated within one year prior to date of Subcontract award.

3.5 HOISTING AND LIFTING

3.5.1 Lifting Operation Plan

A Lifting Operation Plan and procedure that is fully in accordance with the requirements of OSHA regulations is required. Include drawings/sketches of lifting slings, lifting equipment, and tag lines. Show weights, center of gravity, and clearances of load over entire lift. Provide details showing any structural mounting of hoisting equipment on sheaves or structural steel, and loading calculations on any such structural mounting showing forces, weights, turning moments, etc. Include a written procedure with the drawings describing all lifting operations. Use spreader bars wherever necessary to prevent hoisting cables from contacting equipment/material.

3.6 QUALITY CONTROL

3.6.1 Licenses

The Subcontractor or their Lower Tier Subcontractors are required to be licensed by the State of Florida or have an equivalent out-of-state license in all areas applicable to this Subcontract. Refrigerant Technicians are required to provide the Contracts Administrator copies of their EPA approved Technician Certificates. Asbestos Abatement Subcontractor are required to be licensed by the State of Florida.

3.6.2 Inspections

Conduct quality assurance of the project site through daily inspections. Submit to Contracts Administrator a Daily Quality Assurance Inspection Report describing progress achieved along with inspection record of work installed. Include safety issues addressed with employees and lower-tier subcontractors, discussions of work to be performed by lower-tiers arriving on site that day, inspection of equipment they plan on using as well as maintenance records and lower-tier employee training records for said equipment. Additionally describe all equipment used, number of personnel on site classified by trade and weather conditions, if applicable. Submit Reports for the previous week on Mondays.

Notify Contracts Administrator forty-eight (48) hours prior to concrete pours, welding and prior to any concealment of work. Jointly establish "Hold Points" for inspection, including record drawing update reviews, between the, Subcontractor, Lower-tier Subcontractor's and Contracts Administrator. Notify Contracts Administrator forty eight (48) hours in advance of these Hold Point Inspections.

3.7 FIRE PREVENTION

A Hot Work Permit is required prior to any activity in which hot work may occur, such as cutting, grinding or open flame. Contact the Duty Office at 861-5050 to request a Hot Work Permit Inspection and post permit properly.

-- End of Section --